

What is claimed is:

1. A positive resist composition comprising:

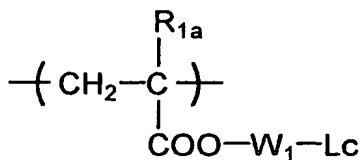
(A) a resin capable of increasing its solubility in an alkali developer under action of an acid,

wherein the resin contains a repeating unit originated in an acrylic acid ester derivative in an amount of 50 to 100 mol% based on all repeating units and

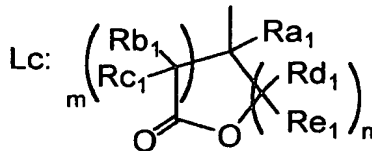
wherein the resin has repeating units of at least one kind selected from repeating units represented by the following formula (IV) and repeating units having groups represented by the following formula (V-1), (V-2), (V-3) and (V-4); and repeating units represented by the following formula (AII),

(B) a compound capable of generating an acid upon irradiation with actinic rays or radiation, and

(C) an organic solvent comprising at least one solvent selected from a propylene glycol monoalkyl ether carboxylate, an alkyl lactate and a linear ketone; and a cyclic ketone:

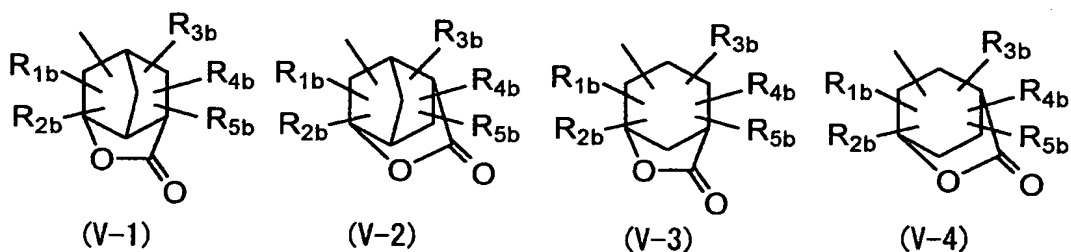


(IV)

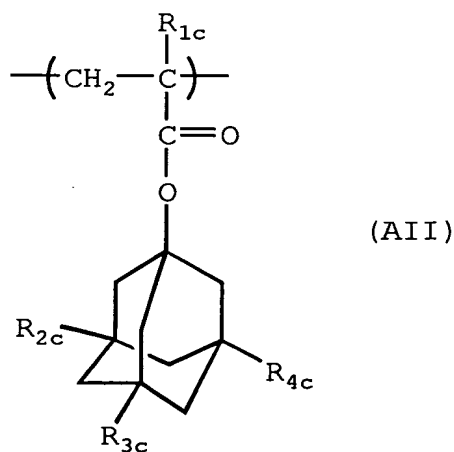


wherein R_{1a} represents a hydrogen atom or a methyl group, W_1 represents a single bond or a divalent linking group,

R_{a1} , R_{b1} , R_{c1} , R_{d1} and R_{e1} each independently represents a hydrogen atom or an alkyl group, m and n each independently represents an integer of 0 to 3, and $m+n$ is from 2 to 6:



wherein R_{1b} to R_{5b} each independently represents a hydrogen atom, an alkyl group, a cycloalkyl group or an alkenyl group, and two of R_{1b} to R_{5b} may be combined with each other to form a ring:



wherein R_{1c} represents a hydrogen atom or a methyl group, and R_{2c} to R_{4c} each independently represents a hydrogen atom, a hydroxyl group, an alkoxy group, an acyloxy group or an alkyloxycarbonyloxy group, provided that one or two of R_{2c} to R_{4c} represents a hydroxyl group.

2. The composition according to claim 1, wherein the resin (A) contains a repeating unit originated in an acrylic acid ester derivative in an amount of 60 to 100 mol% based on all repeating units.

3. The positive resist composition according to claim 1, wherein in the resin (A), all repeating units are repeating units originated in an acrylic acid ester derivative.

4. The composition according to claim 1, wherein the compound (B) is at least one of a triarylsulfonium salt compound and a phenacylsulfonium salt compound.

5. The composition according to claim 1, wherein the compound (B) contains a triarylsulfonium salt compound and a phenacylsulfonium salt compound.

6. The composition according to claim 1, wherein the cyclic ketone is contained in an amount 20 to 70% by weight based on the total amount of the organic solvent (C).

7. The composition according to claim 1, wherein the cyclic ketone is contained in an amount 30 to 60% by weight based on the total amount of the organic solvent (C).

8. The composition according to claim 1, wherein the resin (A) contains a repeating unit having an alkali-soluble group protected by a 1-adamantyl-1-alkyl group.

9. The composition according to claim 1, wherein the content of the repeating units represented by formula (IV) is from 20 to 70 mole % based on the total repeating units in the resin.

10. The composition according to claim 9, wherein the content of the repeating units represented by formula (IV) is from 25 to 60 mole % based on the total repeating units in the resin.

11. The composition according to claim 1, wherein the content of the repeating units represented by formulae (V-1) to (V-4) is from 20 to 70 mole % based on the total

repeating units in the resin.

12. The composition according to claim 11, wherein the content of the repeating units represented by formulae (V-1) to (V-4) is from 25 to 60 mole % based on the total repeating units in the resin.

13. The composition according to claim 1, wherein the content of the repeating unit represented by formula (AII) is from 5 to 50 mole % based on the total repeating units in the resin.

14. The composition according to claim 13, wherein the content of the repeating unit represented by formula (AII) is from 10 to 40 mole % based on the total repeating units in the resin.

15. The composition according to claim 1, further comprising a nitrogen-containing basic compound.

16. The composition according to claim 1, further comprising at least one of fluorine-based and/or silicon-based surfactants.

17. A pattern formation method comprising steps of forming a resist film by using the positive resist composition claimed in claim 1, and exposing and developing said resist film.